

FIG. 2

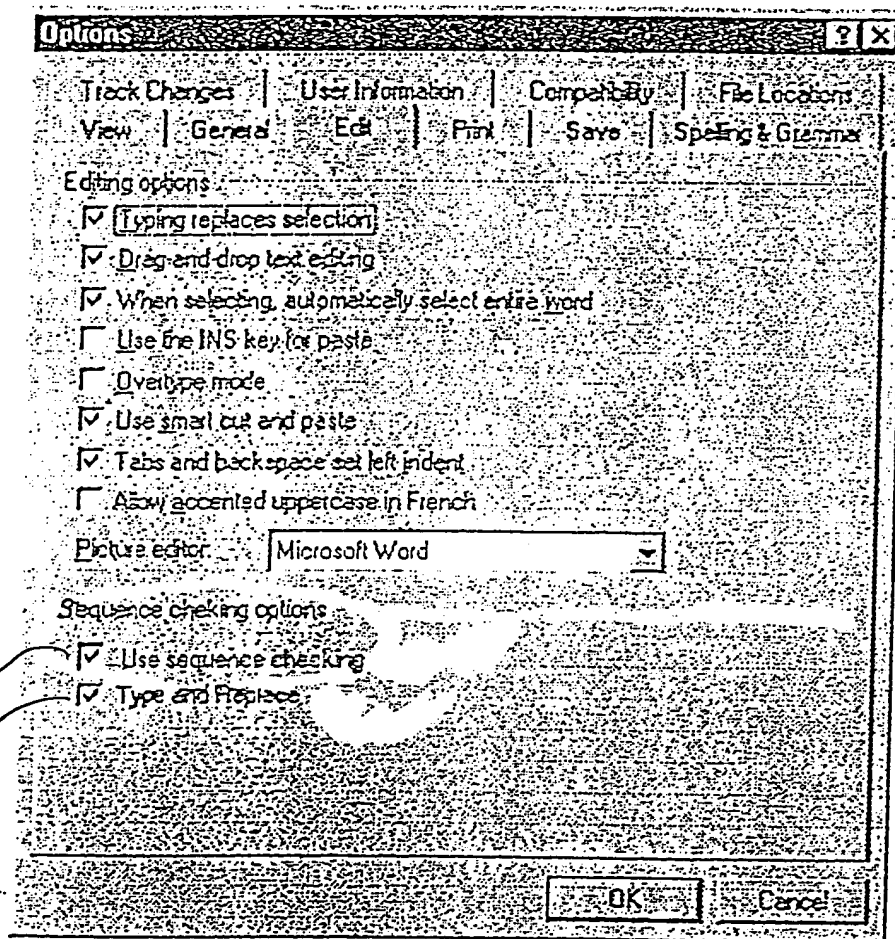


Fig. 3

CHARACTER		()	ind_c hars	abbr	delimit	number	ind_vo wel	norm_ conso	ext_c onso	virama	nukta	dep_vo wel	vowel _sign	accent	zero width chars
CONTEXT	STATE		k	Ab	D	Nb	lv	Nc	Ec	V	Na	Dv	Vs	Ac	Zw
initial	0	0	1a	2a	3a	4a	5a	9a	10a						
k	1	0													
Ab	2	0													
D	3	0													
Nb	4	0													
lv	5	0											7a	6a	
lvAc	6	0											8i1	6r1	
lvVs	7	0											7r1	8a	
lvVsAc	8	0											8r2	8r1	
Nc	9	10									10a				
NcNa	10	0								11a		14a	18a	20a	
NcNaV	11	12													12a
NcNaVZc	12	*						13a	10a						
NcNaVNc	13	10									10a				
NcNaDv	14	0										14r1	16a	15a	
NcNaDvAc	15	0										16r2	17i1	15r1	
NcNaDvVs	16	0										16r2	18r1	17a	
NcNaDvVsAc	17	0										17r3	17r2	17r1	
NcNaVs	18	0										18i1	18r1	19a	
NcNaVsAc	19	0										17i2	19r2	19r1	
NcNaAc	20	0										15i1	19i1	20r1	

Fig. 5

VIETNAMESE SEQUENCE CHECKING STATE TRANSITION GRAPH AND CHART

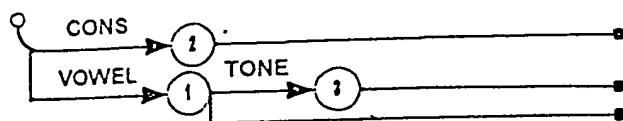


Fig. 6A

CHARACTER			VOWEL	TONE	CONS
CONTEXT	STATE		V	T	C
initial	0	0	1a		2a
V	1	0		3a	
C	2	0			
VT	3	0		2r	

Fig. 6

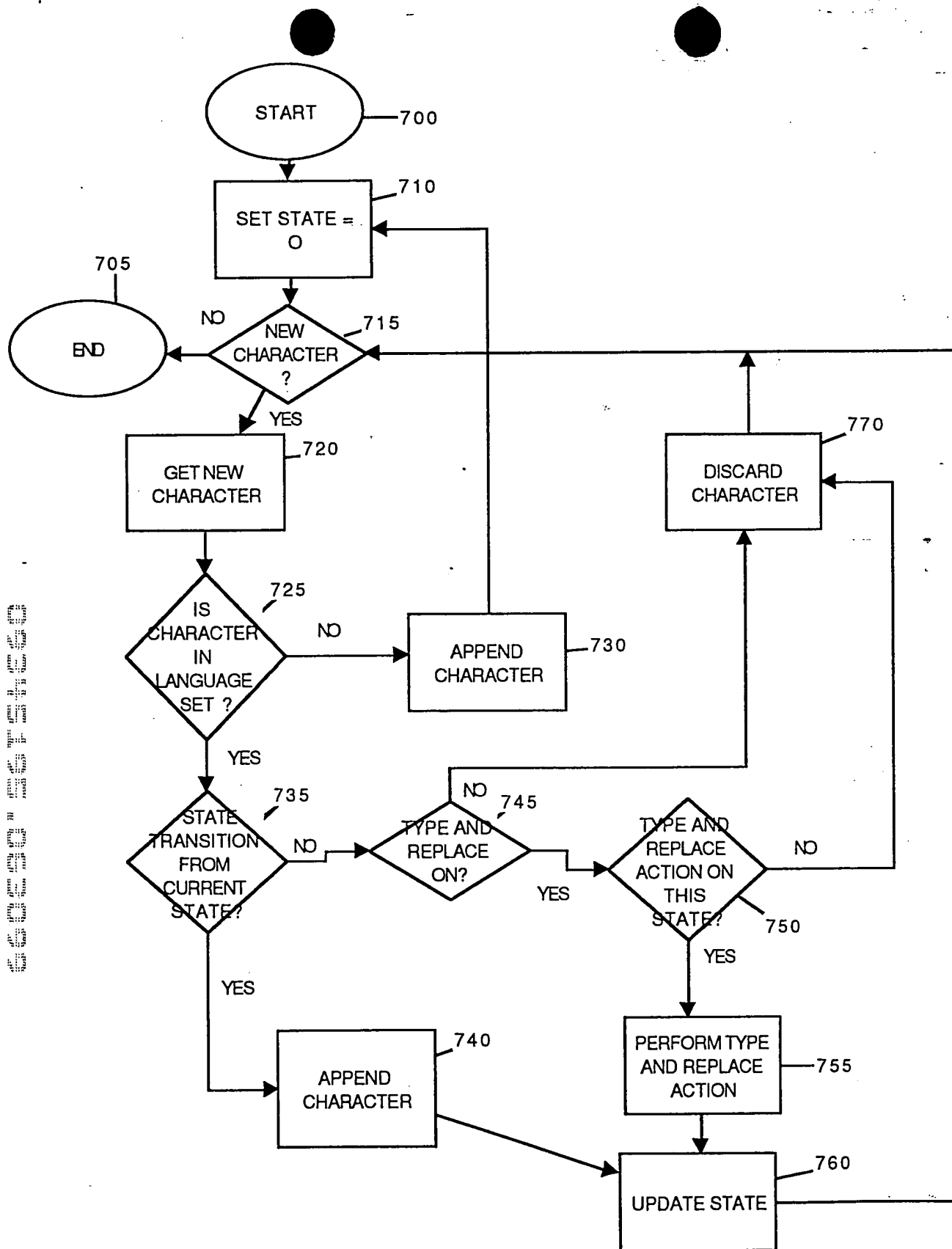


FIG. 7

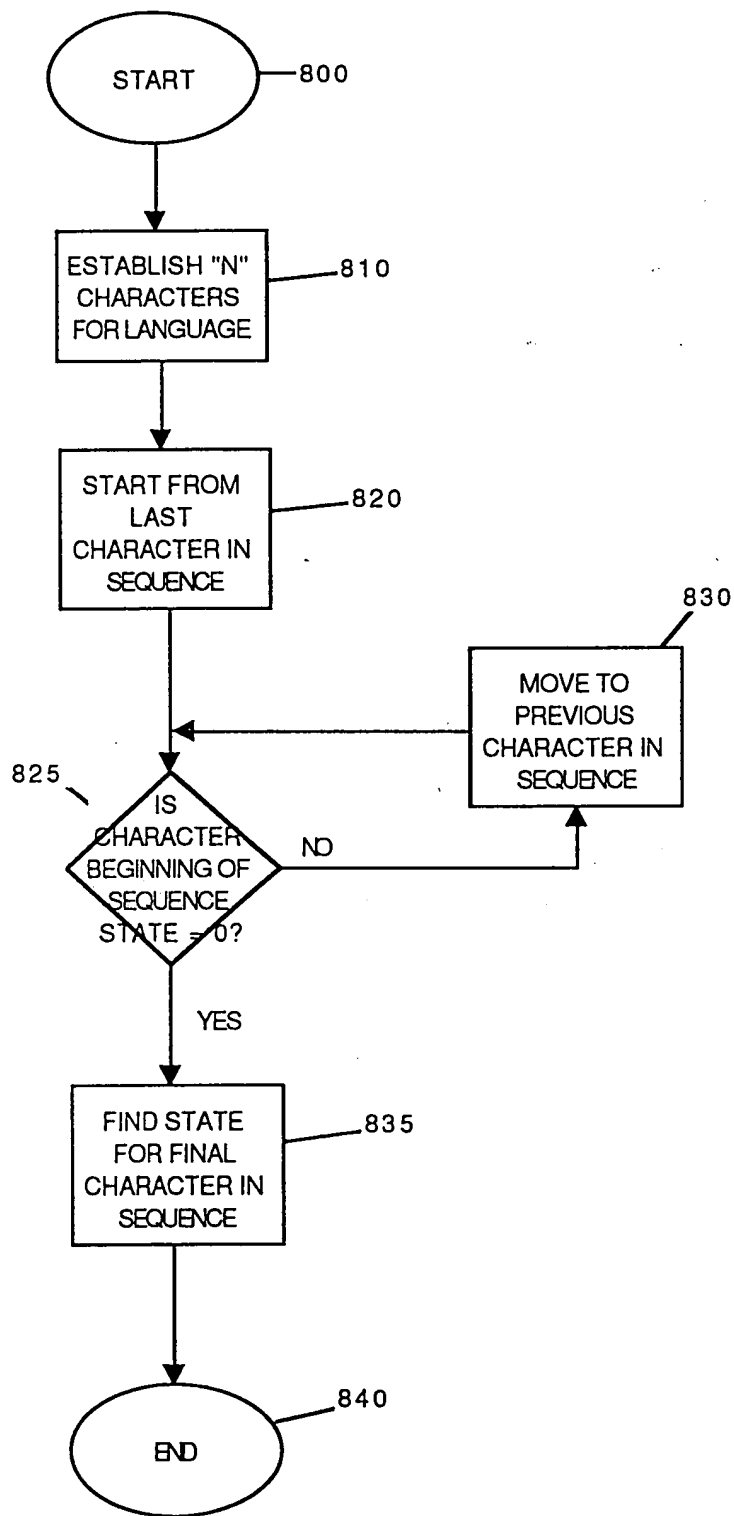


FIG. 8

SYMBOL	INDEX	ACTION	EXAMPLE
Char a	IP	Append the character char	$AB \Rightarrow Ca \rightarrow ABC$
Char I [n]	IP-n where $n > 0$	Insert the character Char at the index location (before the ith character from the right)	$ABD \Rightarrow Ci] \rightarrow ABCD$
d[1]	IP-1	Remove the previous character	$AB \Rightarrow d \rightarrow A$
dn	IP-n where $n > 1$	Remove the character at the index location	$ABC \Rightarrow d2 \rightarrow AC$
Char r[1]	IP-1	Replace the previous character with Char	$AC \Rightarrow Br \rightarrow AB$
Char rn	IP-n where $n > 1$	Replace the character Char at the index location with the new character	$ADC \Rightarrow Br2 \rightarrow ABC$
Cxy		Contextual information (this does not necessarily generate an action) for a possible character composition by the client application. In the Thai transition table "x" has the following values: "a" for composing the last 2 characters into LV3 (Sara-AE) or "b" for composing the last 2 characters into FV3 (Sara-Am). "y" indicates the number of the next transition state.	$ABC \Rightarrow Cx2 \rightarrow AD$ (if x composes B and C into D)

SYMBOL	ACTION	EXAMPLE
FV3r	Substitute the last character with FV3	$\Rightarrow FV3r \rightarrow$

Fig 9A

keyboard input	Output
क	क
,	क्
क	क्क
ी	क्की

Fig 10

keyboard input	Output
क	क
,	क्
ी	क्

Fig. 11

keyboard input	Output
क	क
,	क्
य	क्य
ि	किय
ी	कियं
ो	क्यों

Fig. 12